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| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.   |
|--|-------------|----------------------|---------------------|--------------------|
| 09/896,503   | 06/29/2001  | Lawrence J. Ronk     | TI-30890            | 9240               |
| 23494  | 7590        | 07/02/2004           | EXAMINER            |                    |
| TEXAS INSTRUMENTS INCORPORATED<br>P O BOX 655474, M/S 3999<br>DALLAS, TX 75265 |             |                      |                     | PATEL, KANJIBHAI B |
| ART UNIT   |             | PAPER NUMBER         |                     |                    |

2625

DATE MAILED: 07/02/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

| <b>Office Action Summary</b>   | <b>Application No.</b><br>09/896,503 | <b>Applicant(s)</b><br>RONK ET AL. |
|--------------------------------|--------------------------------------|------------------------------------|
| <b>Examiner</b><br>Kanji Patel | <b>Art Unit</b><br>2625              |                                    |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 29 June 2001.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## **Disposition of Claims**

4)  Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) 5-7 is/are allowed.

6)  Claim(s) 1-4 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 29 June 2001 is/are: a)  accepted or b)  objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date .  
4)  Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## DETAILED ACTION

### *Drawings*

1. The drawings (Figures 8-9) are objected to because of very poor quality printing. It is difficult to read and understand easily.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-4** are rejected under 35 U.S.C. 102(e) as being anticipated by Iwasaki (US 6,711,287 B1).

**For claim 1**, Iwasaki discloses a method for video object feature data generation (figures 1-4; at least column 6, lines 11-22), comprising:

- (a) extracting a first set of features from a moving object detected in a sequence of images (section 152 in figure 2; step S102 in figure 3 ; step S202 in figure 5; column 6, lines 31-35; in figure 9 extraction of color histogram provides a first set of features);
- (b) extracting a sequence of grid blocks corresponding to motion of said object in said sequence of images (column 8, lines 23-66; segmentation is used to generate grid blocks);
- (c) storing said first set of features and said sequence of grid blocks (image feature database 109 in figures 1-2 are used for storage; column 6, lines 11-17).

**For claim 2**, Iwasaki discloses the method wherein step (a) includes extracting features in every image in said sequence containing said object (section 152 in figure 2; step S102 in figure 3 ; step S202 in figure 5; column 6, lines 31-35);

**For claim 3**, Iwasaki discloses the method further comprising: extracting features

and associating said grid-block extracted features with said grid block sequence images (column 8, lines 23-66; segmentation is used to generate grid blocks);

**For claim 4,** Iwasaki discloses the method wherein said first set of extracted features includes a color histogram (at least column 8, lines 5-22).

***Allowable Subject Matter***

3. The following is a statement of reasons for the indication of allowable subject matter:

**Claims 5-7 are allowed.**

For claim 5, prior art on record fails to teach or suggest, alone or in combination, a method of searching for a video object, comprising, among other things, ranking said feature vectors of said database according to the results of step c and finding video objects by an association of video objects with said feature vectors of said database together with the results of step d.

***Other prior art cited***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chang et al. (6,609,134 B1) disclose an apparatus and method for retrieving moving picture using tree-structured moving picture index descriptor.

Koga (US 6,462,773 B1) discloses a video monitoring system.

Malzbender (US 5,724,435) discloses a digital filter and method of tracking a structure extending in three spatial dimensions.

Watanabe (US 5,103,305) discloses a moving object detecting system.

### Contact information

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Kanji Patel** whose telephone number is (703) 305-4011. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 6:30 p.m. Friday off.

If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, **Mehta, Bhavesh**, can be reached on (703) 308-5246.

Any inquiry of general nature or relating to the status of this application should be directed to the **Group receptionist** whose telephone number is (703) 305-3800.

The **Fax number** for this group is (703) 306-9306.

*kanji patel*

Kanji Patel  
Patent Examiner  
Group Art Unit 2625  
June 28, 2004